

Świąteczne Ciemne z Browamatora

- Gravity **17.7 BLG**
- ABV **7.6 %**
- IBU **48**
- SRM **23.2**
- Style **Christmas/Winter Specialty Spiced Beer**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **2.7 liter(s) / kg**
- Mash size **20 liter(s)**
- Total mash volume **27.4 liter(s)**

Steps

- Temp **62 C**, Time **60 min**
- Temp **72 C**, Time **15 min**
- Temp **76 C**, Time **5 min**

Mash step by step

- Heat up **20 liter(s)** of strike water to **69.8C**
- Add grains
- Keep mash **60 min** at **62C**
- Keep mash **15 min** at **72C**
- Keep mash **5 min** at **76C**
- Sparge using **12.7 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|------------------------------|----------------|-------|-----|
| Grain | Pilzneński Viking Malt | 4.4 kg (59.5%) | 80 % | 4 |
| Grain | Wędzony bukiem Viking Malt | 0.6 kg (8.1%) | 80 % | 10 |
| Grain | Wędzony Jabłonią Viking Malt | 0.6 kg (8.1%) | 80 % | 10 |
| Grain | Karmelowy Żytni Viking Malt | 0.6 kg (8.1%) | 70 % | 200 |
| Grain | Karmelowy 150 Viking Malt | 0.6 kg (8.1%) | 75 % | 150 |
| Grain | Castle Malting Cafe Light | 0.6 kg (8.1%) | 70 % | 250 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|----------|--------|--------|------------|
| Boil | Comet | 40 g | 50 min | 8.3 % |
| Boil | Fantasia | 20 g | 20 min | 4.3 % |
| Boil | Comet | 20 g | 20 min | 8.3 % |
| Boil | Fantasia | 40 g | 10 min | 4.3 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|------|------|------|--------|------------|
| T-58 | Ale | Dry | 23 g | SafBrew |

Extras

| Type | Name | Amount | Use for | Time |
|-------|---------------|--------|---------|--------|
| Spice | Cynamon Cięty | 40 g | Boil | 20 min |